

**MONOCERONYCHUS BOREUS, A NEW SPECIES OF SPIDER MITE
FROM OREGON**(ACARINA: TETRANYCHIDAE)¹G. W. KRANTZ,² *Oregon State College, Corvallis*

The members of the genus *Monoceronychus* McGregor are characterized by Pritchard and Baker (1955) as elongate forms with an anterior propodosomal projection, and which lack integumental striae in the region of the third pair of dorsocentral hysterosomal setae. Representatives of the genus have been found only on monocotyledonous or gymnospermous plants, while species of the closely related genus *Aplonobia* Womersley apparently are confined to dicotyledonous plants. An exception to this relationship is *Aplonobia corynetes* (P. and B.) which has been collected only from grass. This species originally was described as belonging to the genus *Monoceronychus* in the paper cited above, but more properly fits the diagnosis of *Aplonobia* (Baker, personal communication).

Seven species of the genus *Monoceronychus* are cited in the key provided by Pritchard and Baker (1955). Collecting data indicates a more or less southern and southwestern distribution of the described forms (California, Florida, and North Carolina). It is of some interest, therefore, that the species described below was taken from grass on a high mountain slope (3600') in Oregon, where temperatures often are below freezing.

***Monoceronychus boreus*, n. sp.**

(Figs. 1-3)

Female—Length of idiosoma averages 189 μ with a range of 165-198 μ ; width of idiosoma at the level of insertion of legs III averages 418 μ , with a range of 396 to 429 μ . Rostrum extending well beyond the base of femur I. Stylophore slender, weakly acuminate anteriorly and with slight lateral concavities posteriorly. Legs I shorter than body; distal hair of internal pair of duplex setae little more than half the length of distal seta of external pair; with five tactile setae and one sensory hair proximal to duplex setae; femoral setae slender and spiny. Duplex setae of tarsus II (fig. 2) similar in length to internal pair of tarsus I.

Dorsum with anterior shield and posterior unstriated area; propodosomal shield patterned as illustrated (fig. 3) and ending anteriorly in a short rostral projection; anterior propodosomal setae spinose, inserted in lateral protuberances, somewhat larger than second and third pairs of propodosomal setae. Dorsomedian portion of idiosoma transversely striated and bearing the humeral, first dorsolateral and first dorsocentral hysterosomals setae. Dorsocentral hysterosomals spinose, smaller than dorsolaterals. Third dorsocentrals inserted on elongate, weakly reticulate and patterned posterior unstrated area (shield?). With three pairs of large heavily spinose caudal setae.

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Perigenital integument (fig. 1) strongly folded laterally and posteriorly; anal shield more or less truncate posteriorly.

Male.—Unknown.

Type locality.—Four females from Grass Mountain Summit, Benton County, Oregon, five miles northwest of Alsea, elevation 3600'; Oct. 3, 1960: in grass (collected by J. D. Lattin). *Holotype* female will be deposited at the U. S. National Museum, Washington, D. C. *Paratypes* will be deposited in the collections of the University of California, Berkeley, and of Oregon State College, Corvallis.

M. boreus may be separated from the other described species of *Monoceronychus* through the use of the following key.

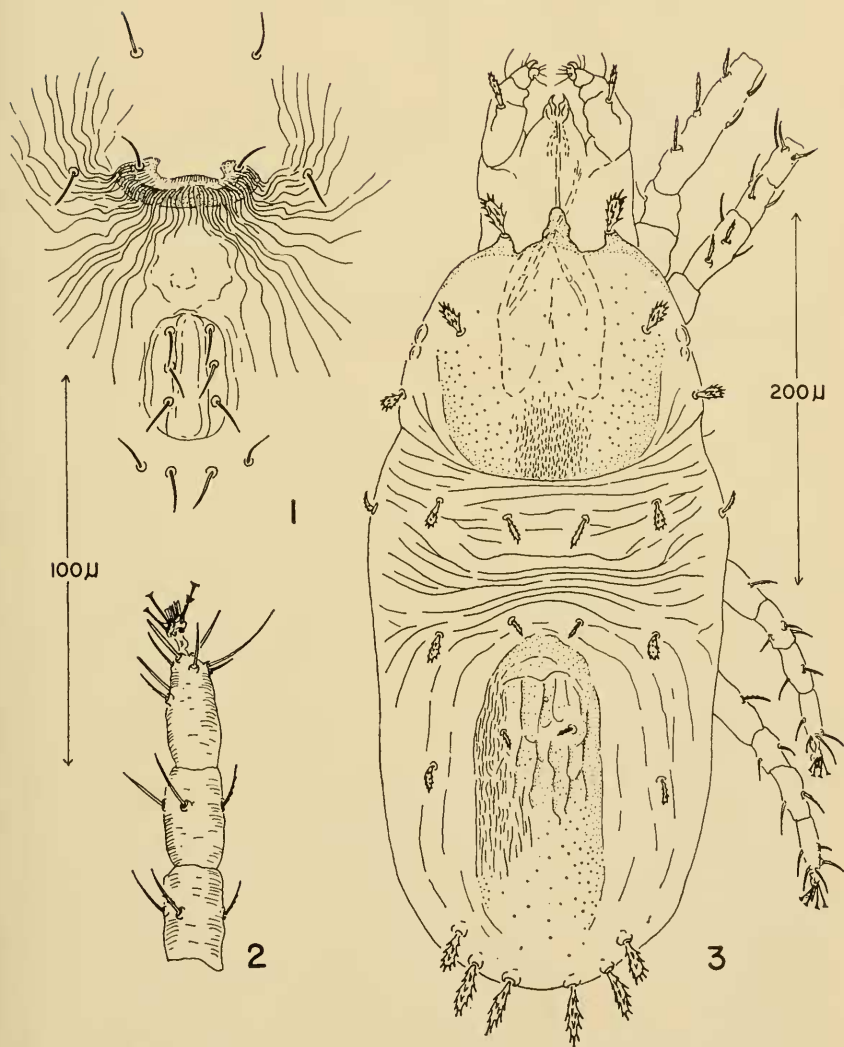
EMENDED KEY TO THE GENUS MONOCERONTYCHUS MCGREGOR

(Adapted from Pritchard and Baker, 1955)

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|---------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 1. Propodosoma with anteromedian projection much shorter than rostrum..... | 2 |
| Propodosoma with anteromedian projection as long as, or longer than, rostrum | 7 |
| 2. Hysterosoma with caudal two pairs of setae slender, weakly spinose..... | 3 |
| Hysterosoma with caudal two pairs of setae spatulate or broadly lanceolate | 5 |
| 3. Anterior legs longer than body | machetes P. & B. |
| Anterior legs shorter than body | 4 |
| 4. Caudal two pairs of setae elongate, more than twice as long as third dorsocentral hysterosomals | enoplus P. & B. |
| Caudal two pairs of setae short, only slightly longer than third dorso-central hysterosomals | mcgregori P. & B. |
| 5. Hysterosoma with caudal three pairs of setae broadly spatulate..... | |
| | californicus McGregor |
| Hysterosoma with caudal three pairs of setae broadly lanceolate..... | 6 |
| 6. Third dorsocentrals distinctly shorter and narrower than third dorso-laterals; propodosomal pattern made up of broken longitudinal striae | boreus , n. sp. |
| Third dorsocentrals similar in length and breadth to third dorsolaterals; propodosomal pattern areolate | aechmetes P. & B. |
| 7. Propodosomal projection covering only rostrum; hysterosoma with caudal three pairs of setae slender, tapering, and set on strong tubercles | scolus , P. & B. |
| Propodosomal projection covering entire gnathosoma; hysterosoma with caudal three pairs of setae differing in size and shape and set on small tubercles | linki P. & B. |

REFERENCES

- Pritchard, A. E., and E. W. Baker, 1955. A revision of the spider mite family Tetranychidae. Pacific Coast Entomological Society Memoir Series, vol. 2, 472 pages.



Monoceronychus boreus, n. sp. Fig. 1, genitoanal region of female; fig. 2, tarsus II of female; fig. 3, dorsum of female.